

The Moderator Effect of Communication in Marketing Channels of Distribution; The Case of Car's Industry in Canada

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Introduction

At this point in time when an important turning point is emerging in the relationship between manufacturers and dealers, we note the increasing power of negotiation of the latter, vis-à-vis the manufacturers. There is a tendency for consolidation at the level of the dealers, which are creating quasi associations to achieve superior powers of purchasing and novel forms of integrating their common interests. The bottom line for these changes is to improve the competitive position and the negotiating capacity of the dealers, to promote a significant increase in the growth sales through franchising (Stern and El-Ansary 1992), to increase the quality sought by the consumers (a feature of the franchising approach) and to improve the demand for custom quality goods on the domestic and export markets.

The franchising sectors, which have experienced the most dramatic increase in volume of sales, are those in services, and, of course, evidently those associated with automobiles sales.

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The Canadian car industry is the eighth most important car industry in the world. In 2003, it contributed 12% of the net national product. The dominant manufacturers, which maintain assembly presence in the country, are Ford, Daimler Chrysler, GM, Honda, Toyota and Suzuki (Government of Canada, Canada's Automotive Industry 2003).

Although superficially alike, the American and Canadian automotive markets show some differences. For example, on the American market, we can find makes (Japanese and European) in the mid range and high end of the product offerings (luxury segment). This is not necessarily true in the Canadian market, where the imported brands are present in almost every segment of the market. The average Canadian consumer also has the penchant to buy more compact vehicles than his American neighbours and his purchasing behaviour is different. Most of the major studies of automobile sales have been carried out in the US. Therefore, it is interesting to enrich these existing studies from the perspective of the peculiarities of the Canadian market.

Within this context, the objective of this article is to analyse the present relationships between manufacturers and Canadian dealerships selling American cars (GM, Ford and Daimler Chrysler) by examining, in particular, the level of satisfaction of the latter with the manufacturers.

This research specifically analyses the impact of communication on the dependence, the coercive and non-coercive powers, the cooperation, the conflict and finally, the satisfaction of the automobile dealers (Anderson and Gerbing 1988). To do this, we start with the model of Skinner, Gassenheimer and Kelly (model 1) and integrate communication as a construct having an effect on the other concepts (model 2). We then analyse the moderating effect, that is to say the difference between the effects in model 2 and model 1, subsequent to the introduction of the communication effect.

The scope of the study is limited, as only 62 of 400 total dealers have returned properly filled out replies to the survey. Nevertheless, this is an acceptable response rate given that the average survey copes with a 5% response rate. The analysis is based therefore on a regression analysis of latent variables using the optimization technique of the Partial Least Squares (PLS).

This study puts forth a conceptual model and a strategic framework with a set of hypotheses to be tested, a description of the employed methodology, an analysis of the results and finally the pertinent management conclusions along with a proposed future research course of action.

Conceptual Model and Strategic Framework

The distribution channels represent a system of economic and social interaction (Stern and Reve 1980) considered as a supra organization (Stern and El-Ansary 1992) which integrates the dependence (Emerson 1962; Frazier 1983a; Frazier, Gill and Kale 1989; Skinner et al. 1992; Stern and El-Ansary 1992) and the sources or basis of power (Hunt and Nevin 1974; Gaski 1984).

Therefore, the dependence and basis of power represent the fundamental structure of the model. This model is characterized by the nature of the relationship between the parties (Anderson and Narus 1984, 1990), which can affect the level of satisfaction of the dealers (Robicheaux and El-Ansary 1975, Frazier 1983a, b; Anderson and Narus 1984, 1990).

Conflict and cooperation correspond to the dominant behaviours which rule the interactions, the first being an obstacle to the achievement of stated goals, while the second having the opposite effect. These behaviours are distinct but not necessarily opposite. By themselves, they lead to an interdependence of the interactions. In the initial model it is the intermediate latent variables, which mediate the level of satisfaction (Stern and Reve 1980; Brown and Day 1981; Lusch and Brown 1982). The concepts of conflict and satisfaction in the distribution channels have been the focus of numerous researchers (Etgar 1979; Lusch 1976; Brown and Day 1981; Brown, Lusch and Muehling 1983; Dwyer 1980).

But certain variables such as cooperation and dependence have received a lot less attention in marketing literature. This is the primary motivator for introducing these variables in the model.

The initial structural model (model 1) brings together six constructs derived from the previously discussed concepts. The relationships among these constructs (positive or negative) give rise to nine hypotheses in this study (H1 to H9; Fig. 1).

The Dependence Relation

Dependence was first analysed by Emerson (1962), who concluded that in each relation between two parties, the dependence of A increases when A assimilates the objectives of B.

Pfeffer and Salanick (1978) suggested that dependence is a function of the resources invested by A, resources which permit B to attain its objectives. This

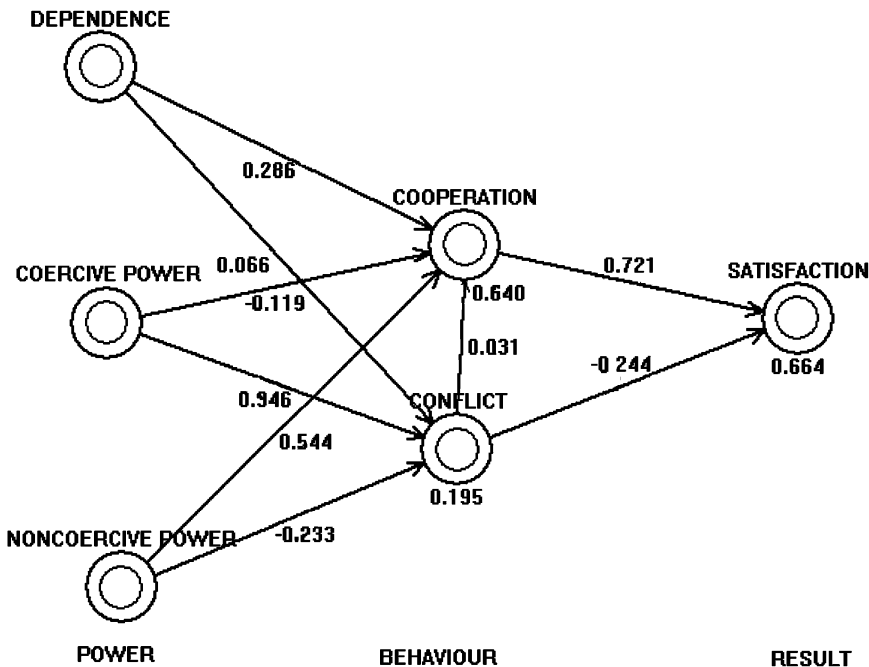


Fig. 1 Graphical representation with all relations and hypothesis between constructs (Model 1). Source: Skinner, S., Gassenheimer, J., & Kelley, S. (1992). Cooperation in supplier-dealer relations. *Journal of Retailing*, 68(2), 174–193

investment into resources increases the dependence of B relative to A. Frazier, Gill and Kale (1989) determined dependence of the retailer as a function of the need to maintain a relationship with the manufacturer or wholesaler in order to reach its stated goals. When the objectives of the distribution channel partners are compatible, the result is a high level of dependence characterized by an active cooperation (Childers and Ruekert 1982, Mohr and Nevin 1990). The dependent member of the channel tries to preserve the relationship (Ross, Lusch and Brown 1982). This effort is what is referred to as cooperation.

The power relationship, when it is unidirectional, can and often does lead to unearned profits for the party exercising this power. This thing occurred with Ford when it started to generate Internet presence and attempted to reach the customer without the dealers' mediation.

The dealerships sent a clear message to Ford; either include in the Internet advertising the location of the nearest dealer or face the consequences. So within the distribution channel from the manufacturers to the buyers, the power slowly shifted downstream towards the dealerships.

When the objectives of channel partners are divergent, it leads to conflicts between the two (Robicheaux and El-Ansary 1975; Frazier and Kale 1990), within the franchise system of relationship it is imperative that the objectives be aligned for the relationship to survive (Spinelly and Burley 1996). The interdependence requires a coordination of tasks between the partners with the purpose of deriving conjoint profits. In the existing relationship between the two parties we analyse the variables; as the proxy for the dependence between them, the source of power brokering (coercive or non coercive), the exercise of their power between the franchiser and the dealership, the level of cooperation and the observed conflict or level of satisfaction from the viewpoint of the dealer.

We can therefore formulate now two of our hypotheses;

- H1. *the high levels of dependence lead to high levels of cooperation.*
- H2. *high levels of dependence lead to low levels of conflict.*

The Foundations of Power

The aspects of power that we analyse are those that establish the basic characteristic of the relationship between two interacting parties, that is to say, the powers of coercion and of the non-coercion like powers of knowledge, legitimacy, reference, and knowledge or expertise (Scheer and Stern 1992). So, the foundations of power have been subdivided into coercive or non-coercive components, according to studies done previously (Lusch 1997; Michie 1978; Brown and Frazier 1978; Lusch and Brown 1982; Ross et al. 1982). Every attempt to increase coercive power can lead to higher levels of conflict in the relationship and diminish the level of cooperation. On the other hand, the non-coercive power increases the level of cooperation and lessens the level of conflict.

We can now formulate the next four hypotheses;

- H3. *high levels of coercive power lead to low levels of cooperation.*
- H4. *low levels of non-coercive power lead to high level of cooperation.*
- H5. *high levels of coercive power lead to high levels of conflict.*
- H6. *high levels of non-coercive power lead to low levels of conflict.*

Cooperation and Conflict

Cooperation refers to the coordinated actions that are similar or complementary by firms in interdependent relationships characterized by reciprocal expectations (Anderson and Narus 1990). Cooperation is an essential component in the distribution channel (Frazier and Rody 1991). The parties have a need to know how to nurture and develop cooperation so that this relation is satisfactory in the long run. Even though this concept is important, very few studies have analysed cooperation exhaustively, instead, choosing to concentrate on the conflict and power aspects. Skinner et al. (1992) indicated that most of this type of research tries to project cooperation as a form of level of satisfaction (Anderson and Narus 1990) or the reverse of conflict (Gattorna 1978). Some authors consider cooperation and conflict as the opposite poles of the same concept, which is really an error of typology: they are in fact distinct concepts according to Anderson and Narus (1984) issuing directly out of the nature of interdependence of the parties involved, and they can coexist within the same relationship.

Frazier (1983a, b) stated that conflict could be transformed into cooperation. This cooperation can emerge from conflict when the objectives of the channel members progressively align. In the long run, we can imagine some retroactive interactions between conflict and cooperation, which leads to diminished conflict and allows for a scope of cooperation.

We can formulate the following hypothesis:

H7. high levels of conflict lead to low levels of cooperation.

A conflict exists when one of the parties believes that the other is preventing it from attaining its objectives (Etgar 1979, Stern and El-Ansary 1992). Nicholls et al. (1993) were the first to describe affective and open (manifest) conflicts, the latter being more dysfunctional than the first (Anderson and Weitz 1992; Morgan and Hunt 1994). Conflict can therefore be the source of rejuvenation and recommitment of resources, helping the development of greater levels of trust, stability, communication and satisfaction (Weitz and Jap 1995). In this manner, functional conflict that builds could become the source of increased productivity in marketing and redefine a more effective structure for the distribution channel.

Satisfaction

When referring to satisfaction, we mean the positive latent affective state achieved by a member of the distribution channel. It captures the overall recognition of all aspects of the common tasks with another firm (Gaski and Nevin 1985; Frazier, Gill and Kale 1989). It is also a key variable in the relationship of two or multiple parties (Dwyer 1980; Stern and Reve 1980; Frazier 1983b). Satisfaction bears upon the morale of the distribution channel members, therefore it is imperative that the members agree to the long-term preservation of the relationship (Churchill and Ruekert 1984; Dwyer 1980).

Our approach will not distinguish between economic satisfaction, which delves into the strictly economic aspects of a relationship, (Gassenheimer and Schmitz 1994; Mohr and Spekman 1994; Geykens and Steenkamp 2000) or social

satisfaction, which put more onus on the non-economic aspects of general satisfaction. This latter may be interpreted as the positive affective response in the psychological realm of the relationship which guarantees the seeking out of contacts by the satisfied member of the other party, in the hope of stimulating the exchange of ideas (Selles 1998; Geykens et al. 1999; Geykens and Steenkamp 2000; de Ruyter et al. 2001; Coote et al. 2003).

H8. *high levels of cooperation lead to high levels of satisfaction.*

H9. *high levels of conflict lead to low levels of satisfaction.*

Communication

Communication enters as an independent concept, which not only has an impact on the other constructs, but also with its moderating effect, modifies profoundly the relationship (*model 2*). As a consequence we posit the hypotheses that this variable increases, in a significant fashion, the impact on the level of satisfaction.

Communication is brought into existence by a set of written rules and objectives defining an affective and bilateral relationship between the parties (Anderson and Narus 1984; Selnes 1998). This presupposes a high quality exchange of information at various levels and as often as necessary. Strengthening of communications supports the use of non-coercive influencing strategies, among which we find exchanges of information. These exchanges have a direct impact on the level of satisfaction (Griffin and Hauser 1992; Moenaert et al. 1994; Gassenheimer et al. 1996; Song et al. 1996, 1997; Ravald and Gronroos 1996; Gronroos 1997; Selnes 1998; Sivadas and Dwyer 2000; Zineldin and Jonsson 2000; Kalafatis 2002; De Ruyter et al. 2001; Friman et al. 2002; Coote et al. 2003; Leek et al. 2003).

We can then, readily, formulate our next set of hypotheses;

H10. *high levels of communication lead to high levels of dependence.*

H11. *high levels of communication lead to low levels of coercive power.*

H12. *high levels of communication lead to high levels of non-coercive power.*

H13. *high levels of communication lead to low levels of conflict.*

H14. *high levels of communication lead to high levels of cooperation.*

H15. *high levels of communication lead to high levels of satisfaction.*

The addition of the communication concept to model 1 should also have moderating influence on the following aspects of relationship (an effect that arises by the lowering of the estimator values of model 1): dependence → cooperation, dependence → conflict, coercive power → cooperation, coercive power → conflict, non-coercive power → cooperation, non-coercive power → conflict, conflict → satisfaction, cooperation → satisfaction (Fig. 2).

We can now proceed to the next set of hypotheses;

H16. *high levels of communication lead to moderating effects of dependence on cooperation.*

H17. *high levels of communication lead to moderating effects of dependence on conflict.*

H18. *high levels of communication lead to moderating effects of coercive power on cooperation.*

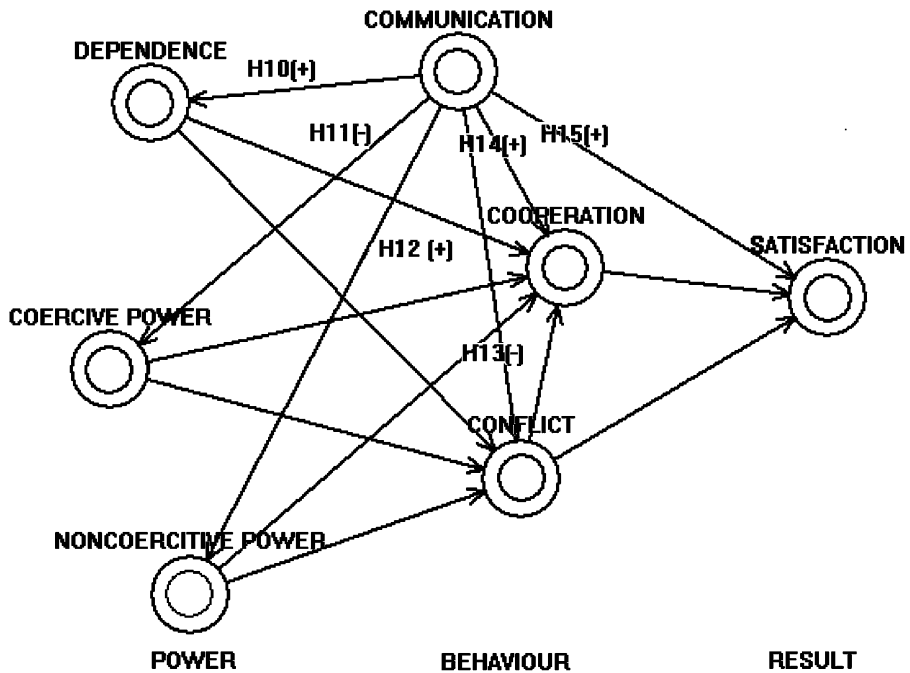


Fig. 2 Model 2. Integration of the communication construct to model 1. Source: Own elaboration

- H19. high levels of communication lead to moderating effects of coercive power on conflict.
- H20. high levels of communication lead to moderating effects of non-coercive power on conflict.
- H21. high levels of communication lead to moderating effects of non-coercive power on cooperation.
- H22. high level of communication leads to moderating effects of conflict on cooperation.
- H23. high level of communication lead to moderating effects of conflict on satisfaction.
- H24. high level of satisfaction leads to moderating effects of cooperation on satisfaction.

The Partial Least Squares Model

The Structural equation modeling is issued from causality research, the most known approach are LISREL and the Partial Least Squares (PLS). Lisrel is the most used approach but the PLS offers some advantages.

- The Measurement Model or Outer Model specifies the type of relationship between the latent variable (or construct) and manifest variables (or indicators).

This relationship could be *reflective* which requires the uni-dimensionality of all indicators of the block.

$$x_{jh} = \pi_{jh}^0 + \pi_{jh} + \xi_j + \varepsilon_{jh} \forall h = 1, \dots, k_j; \forall j = 1, \dots, j$$

$$\pi_{jh}^0 = \text{constant}; \pi_{jh} = \text{regression coefficient}; \xi_j = \text{latent variable}; \varepsilon_{jh} = \text{residual}$$

- The relationship could be *formative* and this signifies that the latent variable is a linear function of associated manifest variables and: $\xi_j = \sum_{h=1}^{k_j} \varpi_{jh} x_{jh} + \delta_j$ where $\varpi_{jh} (h = 1, \dots, k_j) =$ regressors of ξ_j on x_{jh} ; $\delta_j = \text{residual}$
- The Structural Model or Inner Model deals with the relations between the latent variables and the manifest variables, it concerns the mode of estimation of latent variables (or construct) between them and:

$$\xi_j = \beta_j^0 + \sum_{i=1, i \neq j}^j \beta_{ji} \xi_i + \zeta_j, \forall j = 1, \dots, j$$

Where $\beta_j^0 =$ constant, $\beta_{ji} =$ regressor, $\zeta_j =$ residual.

In the PLS approach, hypothesis are less probabilistic than with LISREL, data are modelled by a succession of simple or multiple regressions and there is no identification problems as we can find with LISREL (Chin 1998; Vinzi 2003).

The Research Database

This research was conducted by surveying the car dealerships of American manufacturers such as GM, Ford and Daimler Chrysler, operating in the provinces of Québec and Ontario during the period of January to September 2004.

The questionnaire of this survey has seven sections, each representing a construct (also called a factor or latent variable) as an example, the latent variable Dependence (proxy variable) is represented by four observed variables (indicators or items); *Dgaran*, *Dmontant*, *Ddispon*, *Dmoment*, Coercive power (proxy variable) by four observed variables; *Pcviédi*, *Pcedecis*, *Pcmenca*, *Pcretir*, Non-coercive power (proxy variable) by four *Pnoblíg*, *Pnadmír*, *Pnconfi*, *Pnfávor*, Cooperation (mediating variable) by four (*Coopcon*, *Coopbut*, *Coopro*, *Coopsou*), Conflict (mediating variable) by nine (*Confrag*, *Confrab*, *Conffin*, *Consto*, *Confdís*, *Confqúa*, *Confcou*, *Confpri*, *Confdec*), Satisfaction (a distal variable) by eight observed variables (*Saticom*, *Satidel*, *Satiser*, *Satirec*, *Satipri*, *Satipos*, *Saticam*, *Satiniv*) and Communication (independent variable) by three (*Commrel*, *Commcom* and *Comreg*).

The design of the questionnaire and identification of the observed variables (items) relies on the work of Lambert (1978), Skinner et al. (1992), Baucus et al. (1996), Geykens and Steenkamp (2000). In particular the measure of the items in the constructs of the two types of power (coercive and non-coercive) follows the approach of the work of Skinner et al. (1992), one on cooperation is inspired by the work of Childers et al. (1982) and the one on conflict follows Brown and Day (1981).

We have targeted 400 dealerships of three major manufacturers of American cars sold in Canada. The principal means of contact was by email with a follow up by phone, email, Internet (web site) or by direct face to face. The majority of the data

collection was by individual contact, which favoured the dealerships along the Quebec city-Toronto corridor.

The total number of questionnaires correctly filled out reached 62; the respondents were the owners of the dealerships or those having a significant investment in the business (Table 1).

The Measurement Model

The model described in Fig. 1 includes a number of limited scope data (62 is a response rate of 15.2%) given the number of variables under evaluation (36). For this reason it is not possible to use an optimizing model premised on the Structural Equations Modeling. We can, nevertheless use a non-parametric method to achieve causal modeling (Barclay et al. 1995), which permits us to evaluate the predictive strength of the model, following the optimization technique based on the PLS (W.W. Chin 1998; Chin and Newsted 1999; Chin and Frye 2004).

This analysis is exploratory and it is directly applied to the given database. The stability of the estimators is validated by Student's *T* test issued from a bootstrapping of 500 random samples (Arbuckle 1991, unpublished paper).

Convergent Validity and Reliability Measures

The individual reliability for each item is given by loadings or correlations between the item and the construct (λ). The convergent validity of each construct is acceptable if the indicators of each construct are highly correlated with its latent variable. Carmine and Zeller suggest a loading superior to 0,70 as an acceptable threshold for each indicator to be part of the latent variable. Only the items complying with this prerequisite have been incorporated (Carmine and Zeller 1979).

Student *T*'s for path coefficients have been calculated after computing a bootstrap in order to validate all the model's items (Chin and Newsted 1999, Chin and Frye 2004), all referred items are significant for a probability $\Pr(1-\alpha) \leq 0,05$.

The reliability allows measuring internal coherency of all indicators in relation with the construct; it is determined by the measure of Composite Reliability (ρ_c) for which 0.70 should be an acceptable threshold.

The convergent validity represents the common variance between the indicators and their construct, it is measured by the Average Variance Extracted (AVE) and the acceptable threshold should be superior to 50% (Fornell and Larker 1981), all latent variables comply with this pre-requisite.

Table 1 Breakdown of the North American Dealers' Sample Size

Manufacturers	Number of dealers
Ford Motors of Canada	19
General Motors of Canada	24
Daimler Chrysler of Canada	19
Total	62

Source: Own elaboration

Discriminant Validity

To evaluate any presence of discriminant validity among constructs, it should be necessary that the AVE square root be superior to the correlation between constructs (Fornell and Larker 1981). All constructs comply with this prerequisite.

Predictive Capability of the Structural Models 1 and 2

Once the validities and the composite reliability stated, the structural model could be tested with the analysis of betas (β) and with the explained variance (R^2) of each endogen construct (Fornell et Cha 1994).

Hypotheses Testing

Models 1 and 2 are stable and respond positively to all accepted criteria of composite reliability, convergent and discriminant validity.

The first set of hypotheses (H1 to H9) is linked to model 1. The second set (H10 to H15) keeps track of the added latent variable of communication. The third set of hypotheses (H16 to H24), provide the test of the moderating effect on the proximal variables (on the exercise of power and behaviour) and on the distal variable satisfaction.

The moderating effect of a relationship is calculated as the difference of the betas of model 2 with respect to model 1. This includes the effect due to the introduction of the latent variable communication (Table 2).

Hypotheses of model 1

The hypotheses H2 (high level of dependence lead to low level of conflict) and H7 (high level of conflict lead to low level of cooperation) are not significant for Pr (1-alpha) < 0.10.

The hypotheses H3 (high level of coercive power lead to low level of cooperation) and H6 (high level of non coercive power lead to low level of conflict) are in turn significant for Pr (1-alpha) < 0.10.

The hypotheses H1 (high level of dependence lead to high levels of cooperation), H4 (high levels of non coercive power lead to high level of cooperation), H5 (high level of coercive power lead to high level of conflict), H8 (high level of cooperation lead to high levels of satisfaction) and H9 (high level of conflict lead to low level of satisfaction) are all significant for Pr. (1-alpha) < 0.05.

The predictive capability of the model is satisfactory, the explained variance or the R^2 is 0.6392 and 0.6644 for the endogenous constructs of cooperation and satisfaction. The average redundancy (impact of the of the exogenous indicators on the endogenous constructs) also meets satisfactory bounds (0.4600 for cooperation and 0.4980 for satisfaction). The R^2 and the average redundancy for the construct of conflict are acceptable (0.1945 and 0.1175).

Table 2 Hypotheses for Models 1 and 2, moderator effects, regression coefficients and tests of hypothesis.

HYPOTHESIS	Regression coefficients	T of Student (based on bootstrapping)	Significance
H1. Dependence → Cooperation	0.286	2.6607	Significant for Pr (1-alpha) <0.05
H2. Dependence → Conflict	0.088	0.3651	Non significant
H3. Coercive power→ Cooperation	-0.119	1.4643	Significant for Pr (1-alpha) <0.10
H4. Coercive power → Conflict	0.329	1.9460	Significant for Pr (1-alpha) <<0.05
H5. Non coercive power → Cooperation	0.544	6.6854	Significant for Pr (1-alpha) <0.05
H6. Non coercive power → Conflict	-0.233	1.4249	Significant for Pr (1-alpha) <0.10
H7. Conflict → Cooperation	0.031	0.3505	Non significant
H8. Cooperation→ Satisfaction	0.721	11.0546	Significant for Pr (1-alpha) <0.05
H9. Conflict → Satisfaction	-0.244	3.0653	Significant for Pr (1-alpha) <0.05
H10 (Model 2) Communication → Dependence	0.643	9.7562	Significant for Pr (1-alpha) <0.05
H11 (Model 2) Communication → Coercive Power	-0.459	4.7133	Significant for Pr (1-alpha) <0.05
H12 (Model 2) Communication → Non coercive power	0.731	12.4510	Significant for Pr (1-alpha) <0.05
H13 (Model 2) Communication → Conflict	-0.063	0.2601	Non significant
H14 (Model 2) Communication → Cooperation	0.378	2.4581	Significant for Pr (1-alpha) <0.05
H15 (Model 2) Communication → Satisfaction	0.485	5.0972	Significant for Pr (1-alpha) <0.05
H16 (moderator) (M2-M1) ^a Dependence → Cooperation	0.286-0.189= 0.097	2.4268-1.3767= 1.0501	Non significant
H17 (moderator) (M2-M1) Dependence → Conflict	0.066-0.088= -0.022	0.3906-0.4624= -0.0718	Non significant
H18 (moderator) (M2-M1) Coercive power → Cooperation	0.119-0.048= 0.071	1.3426-0.5434= 0.7992	Non significant
H19 (moderator) (M2-M1) Coercive power → Conflict	0.346-0.329= 0.017	2.4184-1.9089= 0.5095	Non significant
H20 (moderator) (M2-M1) Non coercive power → Conflict	0.233-0.201= 0.032	1.5985-1.1713= 0.4272	Non significant
H21 (moderator) (M2-M1) Non coercive power → Cooperation	0.544-0.348= 0.196	5.9942-3.0064= 2.8978	Significant for Pr (1-alpha) <0.05
H22 (moderator) (M2-M1) Conflict → Cooperation	0.031-0.036= 0.005	0.2918-0.4856= -0.1938	Non significant
H23 (moderator) (M2-M1) Conflict → Satisfaction	0.244-0.185= 0.255	3.1441-3.0568= 0.0873	Non significant
H24 (moderator) (M2-M1) Cooperation → Satisfaction	0.721-0.361= 0.36	10.7809-4.4045= 6.3764	Significant for Pr (1-alpha) <0.05

M2-M1 = Difference between model 2 and model 1

Source: Own elaboration

The equations for Model 1 could be written as following:

$$\text{Cooperation} = 0.286 \text{ Dependence} - 0.119 \text{ Coercive power} + 20.544 \text{ Non coercive power} + 0.031 \text{ Conflict} + \text{residual}.$$

$$\text{Conflict} = 0.066 \text{ Dependence} + 0.346 \text{ Coercive power} - 0.233 \text{ Non coercive power} + \text{residual}.$$

$$\text{Satisfaction} = 0.721 \text{ Cooperation} - 0.244 \text{ Conflict} + \text{residual}.$$

Hypotheses of model 2

The hypotheses of model 2 (H10 to H15) are all significant except for H13. This means that the introduction of the latent variable communication has a statistically significant effect on the proximal variables of power and behaviour (except on conflict) as well as on the distal variable satisfaction (Fig. 3).

The moderating effect is statistically significant for the relationships non-coercive power-cooperation, and cooperation-satisfaction.

There is a moderating effect on the other relationships but this is not statistically significant. This implies that the introduction of communication diminishes the initial impact of these relationships and increases substantially the impact on the

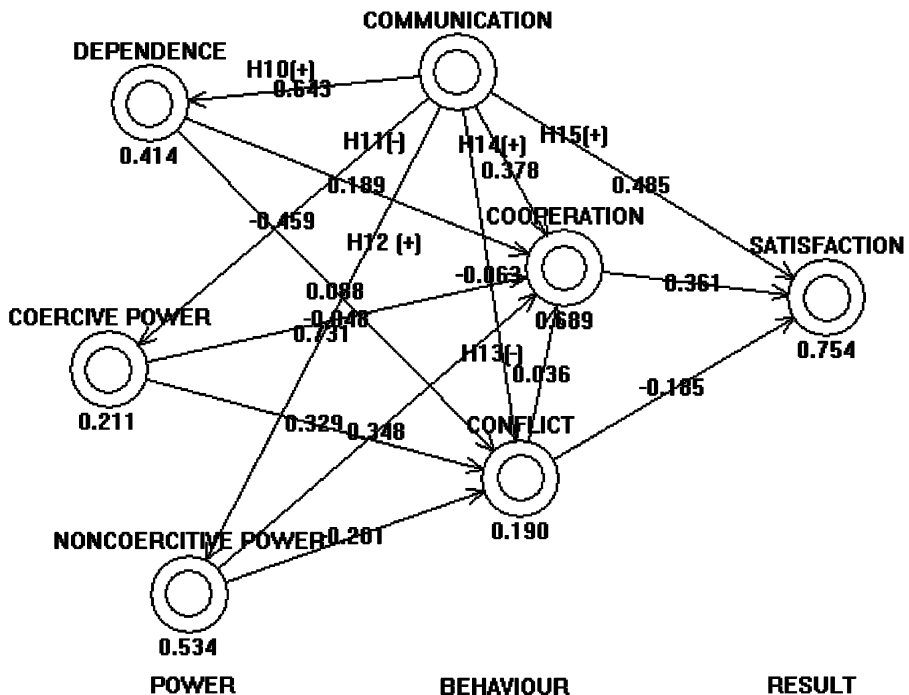


Fig. 3 Hypothesis testing, and results

distal variable of satisfaction (the difference of R^2 on the satisfaction is equal to $0.754 - 0.664 = 0.09$). The equations for Model 2 could be written as following:

$$\text{Cooperation} = 0.378 \text{ Communication} + 0.189 \text{ Dependence} - 0.048 \text{ Coercive power} + 0.348 \text{ Non coercive power} + 0.036 \text{ Conflict} + \text{residual}.$$

$$\text{Conflict} = -0.201 \text{ Non coercive power} + 0.088 \text{ Dependence} + 0.329 \text{ Coercive power} - 0.063 \text{ Communication} + \text{residual}.$$

$$\text{Dependence} = 0.643 \text{ Communication} + \text{residual}.$$

$$\text{Coercive power} = -0.459 \text{ Communication} + \text{residual}.$$

$$\text{Non - coercive power} = 0.731 \text{ Communication} + \text{residual}.$$

$$\text{Satisfaction} = 0.485 \text{ Communication} + 0.361 \text{ Cooperation} - 0.185 \text{ Conflict} + \text{residual}.$$

Managerial Implications

In general, the degree of dependence of the dealer diminishes the level of conflict in the relationship. When the goals of the participants in the distribution channel are convergent, the level of dependence on the manufacturer increases and the dependant party (the dealer) invests more in the relationship to preserve it. This confirms the studies of Mohr and Nevin (1990) and Frazier et al. (1989).

The exclusive agreements signed by the manufacturer have important consequences on the relationship (but note our previous discussion on how, as a result of power migrating down the distribution channel, the dealers are acquiring new negotiating scope, especially ones that hold multi franchises). These agreements involve an imposing number of factors in the relationship (such as the level of involvement of the dealer, the elaboration of rules of engagement, the attainment of specific investment returns), which involve the cooperation of the dealer and affect the degree of satisfaction of the dealer. These agreements or contracts signal a greater level of dependence vis-à-vis the manufacturer and present difficulties for the latter to develop independent distribution options, given the asymmetrical aspect of the power relationship. Efforts to preserve the relationship and to decrease the sources or levels of conflict lead to conjoint initiatives by the parties, which assume the characteristics of cooperation. Our results further corroborate the fact that in the presence of cooperative behaviours, better common results are attained. This corroboration has the hallmarks of active cooperation. On the other hand, the exercise of coercive power diminishes the level of cooperation and lead to future conflict. Therefore, the existence of restrictive covenants in agreements and contracts, such as exclusion of cooperation among dealers can create stress on the mutual interests and affect the motivation and preferences of the relationship participants. This situation can lead to important shifts in the structure of the relationship and influence the conduct of the routine business processes between the two parties.

According to our analysis, there doesn't appear to be meaningful correlation between conflict and cooperation, yet we would have assumed that a certain level of dysfunctional conflict between the parties would lead to the necessity of resolving

some of the problems. It is important to note that among the three manufacturers, only GM seems to have clear policy of reducing channel conflicts, in contrast with the two other competitors. The introduction of the communication factor, treated as the set of written rules and goals has an impact that is statistically significant on the set of proximate variables (power and behaviour) and on the distal variables of satisfaction. It is important to note that all aspects of communication bear significantly on the other variables. The relationship (communication–conflict) was the only one not exhibiting this feature. The introduction of communication increases the impact of the proximate variables on the satisfaction variable by more than 9%.

Only the H21 and H24 hypotheses' moderating effects are significant, which means that communication dilutes their initial effects in a statistically significant fashion.

It is then in the best interest of the manufacturer to increase the level and quality of communication with the dealers, whether in written form or by rules and procedures (the latter being the definition of the 'distribution channels for the flow of information') to facilitate improved bi-directional flow of information and communication (communication would be the result of a purposeful flow of information; Griffin and Hauser 1992). This confirms the findings of Selnes (1998), the manufacturer must invest in systems based communication networks, which would accelerate the purchases, the parts ordering, the refunds to dealers and warranty processing, the orders and payments of the dealers.

Each manufacturer should make its IT technology available to the dealership network and link and maintain such a system for improved efficiency and guarantee a higher level of satisfaction (Frazier and Rody 1991). Objective and rational communications improve the commercial ties and amplify the feeling of satisfaction of the dealer.

Ford and Daimler Chrysler have to diminish the specific channel conflicts and institute a bilateral governance structure for facilitating the ongoing management of the relationship with their dealers. And this, without applying undue pressure or coercive power, which we have seen, dilutes the intended effects.

Cooperation developed should result in increased trust and satisfaction by the dealers based on an equitable sharing of losses and profits by the channel partners (Li and Dant 1997; Nes and Solberg 2002).

Conclusion

The first observation of this research is that the constructs of cooperation and conflict have considerable impact as mediating behavioural variables in the functioning of the distribution channels and an equally important effect on the satisfaction of the dealers. On the other hand, the introduction of communication considerations amplifies the satisfaction component of the dealer. The non-coercive power and dependence lead to better cooperation and manufacturers should invest to develop this aspect of the relationship. Continual feedback, clear written rules, procedures and up to date communications with the dealers is a source of improved relations and cooperation within the distribution channels.

The applications of certain rules and procedures, which can be deemed as exercise of coercive power by the dealers and often used in a deliberate cavalier fashion, often lead to conflict situations and create a diminished sense of satisfaction. Their presence adds disruptive noise in the channel.

The introduction of communication has an impact on the proximate variables of dependence and power (coercive or non coercive) by diminishing the impact of the latter on the mediating variables of behaviour (cooperation and conflict, but not in a statistically significant manner). The introduction of the latent variable of communication has an effect of improving the R^2 of the latent variables of cooperation and satisfaction by 5 and 9% respectively. Therefore, communication increases the importance of these latent variables in the model.

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